The documentation and process conversion measures necessary to comply with this amendment shall be completed by 30 June 2001.

INCH-POUND

MIL-PRF-19500/580A
AMENDMENT 3
30 March 2001
SUPERSEDING
AMENDMENT 2
3 January 2001

PERFORMANCE SPECIFICATION SHEET

SEMICONDUCTOR DEVICE, TRANSISTOR, PNP, SILICON AMPLIFIER,
TYPES 2N4234, 2N4235 AND 2N4236 JAN, JANTX AND JANTXV

This amendment forms a part of MIL-PRF-19500/580A, dated 2 November 1998, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.4, $|h_{fe}|$, conditions; delete “f = 10 MHz” and substitute “f = 1 MHz”.

PAGE 4

4.3, screen table, note 1/, measurement column; delete “(see 4.3.2)” and substitute “(see 4.5.2)”.

4.3.1 Delete and substitute as follows: (This modifies a change made in amendment 1)

“4.3.1. Power burn-in conditions. Power burn-in conditions are as follows: V_{CB} = 10 - 30 V dc, power shall be applied to achieve T_J = 135°C minimum and minimum power dissipation of P_D = 75 percent of maximum rated P_T as defined in 1.3.

PAGE 5

* 4.4.2, delete and substitute: (This reverses a change made by Amendment 2.)

"4.4.2 Group B inspection. Group B inspection shall be conducted in accordance with the conditions specified. Separate samples may be used for each step. In the event of a group B failure, the manufacturer may pull a new sample at double the sample size from either the failed assembly lot or from another assembly lot from the same wafer lot. If the new "assembly lot" option is exercised, the failed assembly lot shall be scrapped. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2 herein. Delta measurements shall be in accordance with table III herein.

Step	Method	Condition
1	1027	Steady-state life: 340 hours, $V_{CB} \geq 20$ V dc, $T_J = 150°C$ minimum. External heating of the device under test to achieve $T_J = 150°C$ minimum is allowed provided that a minimum of 75 percent of rated power is dissipated. No heat sink or forced-air cooling on the devices shall be permitted. n = 45 devices, c = 0
2	1026	The steady-state life test of step 1 shall be extended to 1,000 hours for each die design. Samples shall be selected from a wafer lot every twelve months of wafer production, however, group B shall not be required more than once for any single wafer lot. n = 45, c = 0.
3	1032	High-temperature life (non-operating), $T_A = +200°C$. n = 22, c = 0. "

4.4.2.1, B3, method column; delete "1051" and substitute "1027".

4.5.2e; delete "1200 ms" and substitute "10 ms".

PAGE 8

TABLE I, subgroup 4, method 3306, conditions column; delete "f = 10 MHz" and substitute "f = 1 MHz".

The margins of this amendment are marked with am asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:
Army - CR
Navy - NW
Air Force - 11
NASA – NA
DLA - CC

Review activities:
Army - AR, MI, SM
Navy - AS, CG, MC, OS
Air Force - 19

Preparing activity:
DLA - CC

(Project 5961- 2451)